Q1. Use an appropriate substitution to solve $x\dfrac{dy}{dx} + 4y = x^4 y^2$ .

Q2. Use an appropriate substitution to reduce $(2x + y)\dfrac{dy}{dx} = (5y - 2x)$ it to a separable differential equation.

Q3. Solve the differential equation $(2y + e^x)\dfrac{dy}{dx} + ye^x = 0$.

Q4. Solve the reducible second order differential equation $y'' + y = 0$